



16w

DOCKET NO. AB-311U

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Whitehurst, et al.

Serial No.: 10/730,689

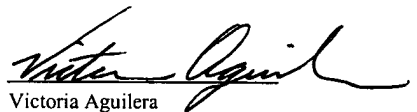
Filed: December 08, 2003

For: Fully Implantable Miniature
Neurostimulator for Spinal Nerve
Root Stimulation as a Therapy for
Angina and Peripheral Vascular
Disease

Group Art 3762
Unit:

Examiner: Droesch, Kristen L.

I hereby certify that this paper is being
deposited with the United States Postal
Service as first class mail in an envelope
addressed to:
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
on this date:

8/9/2004 
Date Victoria Aguilera

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner:

Submitted herewith is PTO/SB/08 containing a list of items that are being
disclosed to the U.S. Patent & Trademark Office (PTO) pursuant to 37 C.F.R. 1.56, 1.97
and 1.98.

This application claims the benefit of United States Provisional Patent
Application Serial Number 60/434,984, filed December 19, 2002.

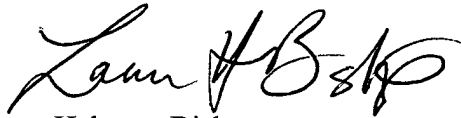
The filing of this Information Disclosure Statement shall not be construed
as a representation that a search has been made. See 37 C.F.R. §1.97(g).

IDS
10/730,689
Page Two

Further, the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56(b). See 37 C.F.R. §1.97(h).

All of the items listed on PTO/SB/08 are in the English language except for item A29. Item A29 listed on page three of PTO/SB/08 has been cited since corresponding Summary (found on page 5336 of the reference which spans pages 5328-5336 in total) is in the English language.

Respectfully submitted,



Laura Haburay Bishop
Reg. No. 47,424

Dated: Aug 09, 2004

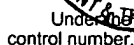
Address all correspondence to:

Bryant R. Gold
Advanced Bionics Corporation
25129 Rye Canyon Rd.
Valencia, CA 91355

Fax: (661) 362-1507

Address all telephone inquiries to:

Laura Haburay Bishop
Telephone: (661) 362-1906



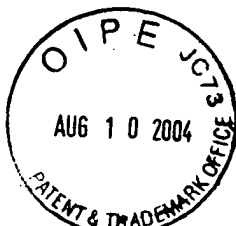
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

[illegible]

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code*	-Number*-Kind Code*(if known)				
	A9	WO-02/34327-A2		05-02-2002	Hill, et al.		
	A10	WO-02/034327-A3		05-02-2002	Hill, et al.		
	A11	WO-02/34330-A2		05-02-2002	Hill, et al.		
	A12	WO-02/034330-A3		05-02-2002	Hill, et al.		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.
³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
 Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/730,689
		Filing Date	December 8, 2003
		First Named Inventor	Whitehurst, et al.
		Group Art Unit	3762
		Examiner Name	Droesch, Kristen L.
		Attorney Docket Number	AB-311U
Sheet	2	of	4

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	A13	ANDERSEN, et al., "Does Pain Relief with Spinal Cord Stimulation for Angina Conceal Myocardial Infraction?", Br Heart J, Vol. 71, (1994), pages 419-421.	
	A14	AUGUSTINSSON, et al., "Epidural Electrical Stimulation in Severe Limb Ischemia," Ann Surg, Vol. 202, (1985), pages 104-110.	
	A15	DeJONGSTE, et al., "Effects of Spinal Cord Stimulation on Myocardial Ischaemia During Daily Life in Patients with Severe Coronary Artery Disease. A Perspective Ambulatory Electrocardiographic Study," Br Heart, Vol. 71, (1994), pages 413-418.	
	A16	DeJONGSTE, et al., "Efficacy of Spinal Cord Stimulation as Adjuvant Therapy for Intractable Angina Pectoris," J Am Coll Cardiol, Vol. 23, (1994), pages 1592-1597.	
	A17	DeJONGSTE, et al., "Stimulation Characteristics, Complications, and Efficacy of Spinal Cord Stimulation Systems in Patients with Refractory Angina: a Perspective Feasibility Study," Pacing Clin Electrophysiol, Vol. 17(11 Pt 1), (Nov. 1994), pages 1751-1760.	
	A18	DeLANDSHEERE, et al., "Effects of Spinal Cord Stimulation on Regional Myocardial Perfusion Assessed by Positron Emission Tomography," Am J Cardiol, Vol. 69, (1992), pages 1143-1149.	
	A19	GRECO, et al., "Spinal Cord Stimulation for the Treatment of Refractory Angina Pectoris: a two year follow-up," PACE, Vol. 22, (1999), pages 26-32.	
	A20	HAUTVAST, et al., "Effect of Spinal Cord Stimulation on Myocardial Blood Flow Assessed by Positron Emission Tomography in Patients with Refractory Angina Pectoris," Am J Card, Vol. 77 (1996), pages 462-467.	
	A21	HAUTVAST, et al., "Relative Changes in Regional Cerebral Blood Flow During Spinal Cord Stimulation in Patients with Refractory Angina Pectoris," European Journal of Neuroscience, Vol. 9, (1997), pages 1178-1183.	
	A22	HAUTVAST, et al., "Effect of Spinal Cord Stimulation on Heart Rate Variability and Myocardial Ischemia in Patients with Chronic Intractable Angina Pectoris - a Prospective Ambulatory Electrocardiographic Study," Clin Cardiol, Vol. 21, (1998), pages 33-38.	

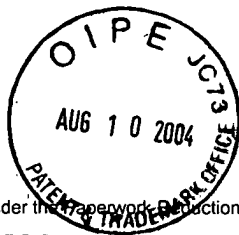
Examiner Signature		Date Considered	
-------------------------------	--	----------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/730,689
		Filing Date	December 8, 2003
		First Named Inventor	Whitehurst, et al.
		Group Art Unit	3762
		Examiner Name	Droesch, Kristen L.
		Attorney Docket Number	AB-311U
Sheet	3	of	4

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A23	HAUTVAST, et al., "Angina Pectoris Refractory for Conventional Therapy - is Neurostimulation a Possible Alternative Treatment?" Clin Cardiol, July 1996, 19(7), pages 531-535.	
	A24	HUBER, et al., "Enhanced Limb Salvage for Peripheral Vascular Disease with the Use of Spinal Cord Stimulation," W V Med J, Vol. 92(2), (1996), 89-91.	
	A25	JACOBS, et al., "Foot Salvage and Improvement of Microvascular Blood Flow as a Result of Epidural Spinal Electrical Stimulation," J Vasc Surg, Vol. 307, (1990), pages 477-480.	
	A26	JESSURUN, et al., "Electrical Neuromodulation for Disabling Angina Pectoris Related to Isolated Stenoses of Small Epicardial Coronary Arteries," J Invasive Cardiol, July 1999, 11(7), pages 435-438.	
	A27	JESSURUN, et al., "Sequelae of Spinal Cord Stimulation for Refractory Angina Pectoris. Reliability and Safety Profile of Long-Term Clinical application," Coronary Artery Disease, Vol. 8, (1997), pages 33-38.	
	A28	JESSURUN, et al., "Longevity and Costs of Spinal Cord Stimulation Systems in Patients with Refractory Angina Pectoris", Third Annual Symposium on Pacing Leads, Ferrara Italy, (Sept. 11-13 1997).	
	A29	LINDEROTH, et al., "Peripheral and Central Nervous System Stimulation in Chronic Therapy-Resistant Pain. Background, Hypothetical Mechanisms and Clinical Experiences (Swedish)", Lakartidningen, Nov. 21, 2001, 98(47) pages 5328-34, 5336.	
	A30	MANNHEIMER, et al., "Effects of Spinal Cord Stimulation in Angina Pectoris Induced by Pacing and Possible Mechanisms of Action," BMJ, Vol. 307, (1993), pages 477-480.	
	A31	MANNHEIMER, et al., "Electrical Stimulation Versus Coronary Artery Bypass Surgery in Severe Angina Pectoris. The ESBY study," Circulation, Vol. 97, (1998), pages 1157-1163.	
	A32	MEGLIO, et al., "Spinal Cord Stimulation Affects the Central Mechanisms of Regulation of Heart Rate," Appl Neurophysiol, Vol. 49, (1986), pages 139-146.	
	A33	MELZACK, et al., "Pain Mechanisms: a New Theory," Science, Vol. 150, (1965), pages 971-979.	
	A34	MOORE, "New Treatment Proposed for Angina", printed 7/30/2004, 1 page.	
	A35	MURPHY, et al., "Dorsal Column Stimulation for Pain Relief from Intractable Angina Pectoris," Pain, Vol. 28, (1987), pages 365-368.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.
³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/730,689
		Filing Date	December 8, 2003
		First Named Inventor	Whitehurst, et al.
		Group Art Unit	3762
		Examiner Name	Droesch, Kristen L.
		Attorney Docket Number	AB-311U
Sheet	4	of	4

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A36	MURRAY, et al., "Spinal Cord Stimulation Significantly Decreases the Need for Acute Hospital Admission for Chest Pain in Patients with Refractory Angina Pectoris," Heart, Vol. 82(1), (July 1999), pages 89-92.	
	A37	MURRAY, et al., "Spinal Cord Stimulation Significantly Reduces Hospital Readmissions in Patients with Intractable Angina Pectoris," Heart, Vol. 79(suppl), (1998), page 48.	
	A38	NORRSELL, et al., "Effects of Spinal Cord Stimulation on Coronary Blood Flow Velocity," Coronary Artery Disease, Vol. 9, (1998), pages 273-278.	
	A39	PEPKE-ZABA, et al., "Validation of Impedance Cardiography Measurements of Cardiac Output During Limited Exercise in Heart Transplant Recipients", Transpl Int, Vol. 3(2), (July 1990), pages 108-112.	
	A40	PETRAKIS, et al., "Prospective Study of Transcutaneous Oxygen Tension (TcPO ₂) Measurement in the Testing Period of Spinal Cord Stimulation in Diabetic Patients with Critical Lower Limb Ischemia," Int Angiol, Vol. 19(1), (March 2000), pages 18-25.	
	A41	ROSEN, et al., "Central Nervous Pathways Mediating Angina Pectoris," Lancet, Vol. 344, (1994), pages 147-150.	
	A42	SANDERSON, et al., "Epidural Spinal Electrical Stimulation for Severe Angina: a Study of its Effect on Symptoms, Exercise Tolerance and Degree of Ischaemia," Eur Heart J, Vol. 13, (1992), pages 628-633.	
	A43	SANDERSON, et al., "Spinal Electrical Stimulation for Intractable Angina - Long Term Clinical Outcome and Safety," Eur Heart J, Vol. 15, (1994), pages 810-814.	
	A44	SANDRIC, et al., "Clinical and Electrocardiographic Improvement of Ischemic Heart Disease After Spinal Cord Stimulation," Acta Neurochir Suppl, Vol. 33, (1984), pages 543-546.	
	A45	SHEALY, et al., "Electrical Inhibition of Pain by Stimulation to the Dorsal Columns: Preliminary Clinical Report," Anesth Analg, Vol. 46, (1967), pages 489-491.	
OTHER PRIOR ART - RELATED APPLICATIONS			
	A46	WHITEHURST, McGIVERN, MANN, and KUZMA inventors for AB-126U; U.S. Patent Application Serial No. 09/929,597; filed August 13, 2001; entitled "Fully Implantable Microstimulator for Spinal Nerve, Spinal Nerve Root, and/or Spinal Cord Stimulation as a Therapy for Chronic Pain".	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind's Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.